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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,310	12/31/2003	David P. Aschenbeck	25320A	1792
22889	7590	01/23/2007		
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			EXAMINER KRUEER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1773	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/749,310

Applicant(s)

ASCHENBECK ET AL.

Examiner

Kevin R. Kruer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18 and 23-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restriction

1. Claims 1-14 and 19-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 1, 2006.

2. Applicant's election with traverse of Group II in the reply filed on November 1, 2006 is acknowledged. The traversal is on the ground(s) that there is substantial overlapping of the subject matter. This is not found persuasive because "substantial overlap" of subject matter is not the standard for determining whether restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 34 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the specification for the limitations "background granules."

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 34 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by "background granules." Herein, any granule will be understood to read on the claimed "background granules."

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 14-18 and 23-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingram (US 3,084,059) in view of Kiik et al (6,585,813).

Ingram teaches an asphalt covered felt material (col 1, lines 20+) which has aggregate particles applied thereto. The size distribution of the particles is selected such that less aggregate is needed to cover the asphalt covered felt. The reduction in aggregate leads to a reduction in price (col 6, lines 9+). The aggregate size is selected according to the formula detailed in column 3, line 32+-column 4, lines 9+. Specifically, the only particles that will be present in the upper layer of asphalt is the largest aggregates with the majority of the aggregate being encapsulated within the asphaltic

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composition. Said particles are herein understood to read on the "first portion of granules" herein claimed. The examiner notes said aggregates contain no anti-microorganism granules.

Ingram does not teach applying a second portion of aggregates that are anti-microorganism. However, Kiik teaches surface covering asphaltic roofing shingles (abstract) with anti-microbial copper or tin particles (abstract). Said particles are applied such that they may enter part-way into the asphalt (0035), but desirably remain on the surface so that they remain active. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the antimicrobial particles taught in Kiik to the surface of the roofing shingle taught in Ingram. The motivation for doing so would have been to improve the anti-microbial properties of the shingle. Furthermore, it would have been desirable that all of said anti-microbial particles remain on the surface of the shingle such that they were not enveloped. The motivation for doing so would have been so that the particles remain active.

With regards to claims 18, 24, 25, 27, and 28, the examiner notes that said percentage of first and second portions of granules that are enveloped by the asphalt is a method limitation since said limitation does not limit in any way the percentage of granules that are enveloped in the final product. Specifically, the claim allows for an additional portion of granules (not the "first portion" or "second portion") to be applied to the roofing shingle. Said additional portion could have any percentage of granules enveloped. In the final product, the skilled artisan could not distinguish between the first portion and additional portion of granules.

Additionally, the examine notes that the 5 component aggregate blend taught in Ingram reads on said claimed range because 33% of said aggregates are category 5 aggregates that will be as large as the asphaltic layer is thick. The 4 component aggregate blend taught in Ingram is also herein understood to read on the claimed percentage because 40% of said aggregates will be category 4 aggregates, thus leaving at least 60% enveloped. The examiner also notes that some of the category 4 aggregates will be enveloped (based upon the aggregate size range and asphaltic layer thickness teachings), thus teaching a layer wherein "about 70%" of said aggregates are enveloped.

With respect to claims 24 and 31, the examiner takes the position any coating will inherently meet said limitation since any amount of first portion of particles will constitute a first and second "predetermined percentage." Furthermore, said limitation is understood to be a method limitation that does not inherently result in a materially different product or distinguish the claimed product from the product taught in the prior art since it will be impossible to tell in the final product which particles were "first portion" particles and which were "second portion" particles. For the same reasons, the limitations of claim 25 are herein understood to be method limitations.

With regard to claims 34 and 36, the examiner takes the position that the particles taught in the applied references read on the claimed "background granules." Furthermore, said third portion is understood to be a method limitation because it is not deemed to result in a materially different product. Specifically, it is impossible to tell in the final product which particles were applied in which "portion." Similarly, the

percentage of claim 25 is understood to be a method limitation because there is no way to tell in the final product which percentage of particles were coated as part of a "first," "second," or "third" portion.

With regard to the particle size of claims 23 and 37, the examiner takes the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the size of said particles in order to get the largest surface area per cost, while maintaining good adhesion and aesthetics. Said particle sizes are known in the art (see US 20050136216A, US 5,356,644, and US 2006/0204719A).

Response to Arguments

Applicant's arguments filed November 1, 2006 have been fully considered but they are not persuasive.

Applicant argues Ingram failed to teach a shingle having deposited anti-microorganism granules and that such particles should be coated as part of a "second portion of granules." The examiner agrees but notes the rejection never relied upon Ingram for such a teaching. Rather, Kiik was relied upon to teach the addition of such particles. With respect to the "second portion" argument, the examiner maintains the position said limitation is a method limitation that does not patentably distinguish the claimed invention from the prior art.

Applicant argues there is no teaching in Kiik of the claimed coating method. The examiner initially reiterates the position of record with regards to the method limitations. Said limitations have not been shown to inherently result in a materially different

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product. Furthermore, the examiner notes that the "second embodiment of Kiik" as summarized by applicant seems to read on the claimed method limitations. Specifically, the antimicrobial particle is applied over a layer to which a first portion of granules has been pre-applied. The application of the granules after the antimicrobial particle application can be read as part of the "second portion" of particles.

Applicant argues the references are silent with respect to particle size. The examiner agrees but maintains the position that it would have been obvious to the skilled artisan to vary the particles size of the anti-microorganism particles for the reasons of record. The examiner has further provided evidentiary references to demonstrate the claimed particle sizes were known in the art at the time the invention was made.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

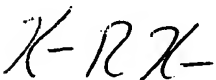
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin R. Kruer
Patent Examiner-Art Unit 1773